# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.   | FILING DATE      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|------------------|----------------------|---------------------|------------------|
| 10/679,128  | 10/03/2003       | Wayne R. Lumpkin     | AVID.19             | · 2259           |
| 25871 7590 03/09/2007<br>SWANSON & BRATSCHUN L.L.C.<br>1745 SHEA CENTER DRIVE<br>SUITE 330<br>HIGHLANDS RANCH, CO 80129 |                  |                      | EXAMINER            |                  |
|   |                  |                      | JOHNSON, MATTHEW A  |                  |
|   |                  |                      | ART UNIT            | PAPER NUMBER     |
|   |                  |                      | 3682                |                  |
|   |                  | ·                    | <u> </u>            |                  |
| SHORTENED STATUTORY PE  | RIOD OF RESPONSE | MAIL DATE            | DELIVERY MODE       |                  |
| 3 MONTHS  |                  | 03/09/2007           | PAPER               |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|  | Application No.   | Applicant(s)   |  |  |  |
|--|---|--|--|--|--|
|  |   |  |  |  |  |
| Office Action Summary  | 10/679,128  | LUMPKIN, WAYNE R.  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit   |  |  |  |
|  | Matthew Johnson   | 3682   |  |  |  |
| The MAILING DATE of this communication app<br>Period for Reply   | ears on the cover sneet with the c  | orrespondence address  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA:  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period was reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |
| Status   |   |  |  |  |  |
| 1) Responsive to communication(s) filed on 05 De   | ecember 2006.   |  |  |  |  |
| /-   | ·   |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |   |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |   |  |  |  |  |
| Disposition of Claims  |   |  |  |  |  |
| 4) ☐ Claim(s) 1-17 is/are pending in the application. 4a) Of the above claim(s) is/are withdray  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) 1-17 is/are rejected.  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or  | vn from consideration.  |  |  |  |  |
| Application Papers   | ·   |  |  |  |  |
| 9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acce Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex   | epted or b) objected to by the I<br>drawing(s) be held in abeyance. See<br>ion is required if the drawing(s) is ob  | e 37 CFR 1.85(a).<br>jected to. See 37 CFR 1.121(d).                       |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul> |   |  |  |  |  |
| Attachment(s)  | ∧ □ Internion 6   | (PTO 413)  |  |  |  |
| <ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ol>   | 4) Interview Summary Paper No(s)/Mail Di 5) Notice of Informal F 6) Other:  | ate  |  |  |  |

Application/Control Number: 10/679,128 Page 2

Art Unit: 3682

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1,4,6,8,14,15 are rejected under 35 U.S.C. 102(b) as being anticipated by Borromeo (USP-4,969,374).

Re clms 1,6,14,15: Borromeo discloses a clamp structure comprising a(n):

- First arm (5) having a distal end (Figure 2; opposite side of 9) defining a
   first threaded bore (7)
- Second arm (6) having a distal end (Figure 2; near 9) defining a second threaded bore (9), wherein the first threaded bore and the second threaded bore are essentially coaxial
- one end of the shank and the shank having a threaded portion (10b) at a second end opposite the first end and a non-threaded clearance portion (10c) between the threaded portion and the head, the screw being configured so that with a threaded engagement between the threaded portion of the shank and one of the first (7) and second (9) threaded bores and the head abutting one of the first and second arms opposite the

Art Unit: 3682

threaded engagement, the clearance portion resides within the other of the first and second threaded bores (C2 L50-58)

Re clms 4,8: Borromeo discloses a clamp structure wherein each of the first and second arms have a proximal end (inside corners of 3) attached to a bicycle component (G).

3. Claims 1,4,6,7,14,15are rejected under 35 U.S.C. 102(b) as being anticipated by Cheng (USP-5,477,747).

Re clms 1,4,6,7,14,15: Cheng discloses a symmetric clamp structure comprising a(n):

- First arm (28 left side, Figure 2) having a distal end (near 30) defining a first threaded bore (30, C2 L47-49)
- Second arm (28 right side, Figure 2) having a distal end (near 36) defining a second threaded bore (30, C2 L47-49)
- Screw (36) comprising a head and a shank (Figure 1), the head being at one end of the shank and the shank having a threaded portion at a second end opposite the first end and a non-threaded clearance portion between the threaded portion and the head, the screw being configured so that with a threaded engagement between the threaded portion of the shank and one of the first (30, left side) and second (30, right side) threaded bores and the head abutting one of the first and second arms opposite the threaded engagement, the clearance portion resides within the other of the first and second threaded bores

Application/Control Number: 10/679,128 Page 4

Art Unit: 3682

Re clms 4,7: Cheng discloses a clamp structure wherein each of the first and second arms have a proximal end (29) attached to a bicycle component (25).

# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1,4-10,11, and 14-17, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelbein (USP-5584210) in view of Borromeo (USP-4,969,374).

Re clms 1, 4-10,11, 14-17: Gelbein discloses a symmetric clamp structure comprising a(n):

- First arm (right side of 54) having a distal end defining a first threaded bore (56)
- · Second arm (left side of 54) having a distal end
- Screw (10) comprising a head and a shank, the head being at one end of the shank and the shank having a threaded portion (58) at a second end opposite the first end
- Housing (20)
- Brake lever (40) pivotably attached to the housing
- Clamp (50) attached to the housing

Gelbein discloses all of the claimed subject matter as described above.

Gelbein does not disclose a second threaded bore, wherein the first threaded bore and the second threaded bore are essentially coaxial, and a screw having a clearance portion between the threaded portion and the head, the screw being configured so that with a threaded engagement between the threaded portion of the shank and one of the first and second threaded bores and the head abutting one of the first and second arms opposite the threaded engagement, the clearance portion resides within the other of the first and second threaded bores.

Borromeo teaches a clamp comprising a first threaded bore (7) and a second threaded bore (9), wherein the first threaded bore and the second threaded bore are essentially coaxial, and a screw (10) having a clearance portion (10c) between the threaded portion (10b) and the head (10a), the screw being configured so that with a threaded engagement between the threaded portion of the shank and one of the first and second threaded bores and the head abutting one of the first and second arms opposite the threaded engagement, the clearance portion resides within the other of the first and second threaded bores (C2 L50-58), to enable the clamping screw itself to be used for forcing apart the two jaws and so that the threading of the hole is not engaged by the screw (C1 L65-68 & C2 L1-8; L50-58).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to employ first and second threaded bores that are essentially coaxial and a screw having a clearance portion between the head and the threaded portion, the screw being configured so that with a threaded engagement between the threaded portion of the shank and one of the first and second threaded bores and the

Art Unit: 3682

head abutting one of the first and second arms opposite the threaded engagement, the clearance portion resides within the other of the first and second threaded bores, as taught by Borromeo, in order to enable the clamping screw itself to be used for forcing apart the two jaws and so that the threading of the hole is not engaged by the screw (C1 L65-68 & C2 L1-8; L50-58).

5. Claims 2,3,12,13, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gelbein in view of Borromeo (USP-4,969,374) further in view of Steinbock (USP-6,381,827).

Re clms 2,3,12,13: Gelbein in view of Borromeo disclose all of the claim limitations, as stated above, but do not disclose that the clearance portion has a length that exceeds an axial length of each threaded bore.

Steinbock teaches that the length of the clearance portion (20) exceeds an axial length of each threaded bore for the purpose of allowing a large shear area which can prevent stripping of the threads (Column 5, lines 35-42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a screw where the length of the clearance portion exceeds an axial length of each threaded bore, as taught by Steinbock, for the purpose of allowing a large shear area which can prevent stripping of the threads (Column 5, lines 35-42).

#### Response to Arguments

6. Applicant's arguments with respect to claims 1-13 have been considered but are most in view of the new ground(s) of rejection.

Application/Control Number: 10/679,128

Art Unit: 3682

### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ruland (USP-5,096,327).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Johnson whose telephone number is 571-272-7944. The examiner can normally be reached on Monday - Friday 8:30a.m. - 5:00p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on 571-272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJ

MJ 3/5/2007

RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER

Page 7